



# CLEARSTREAM<sup>®</sup>

WASTEWATER SYSTEMS, INC.

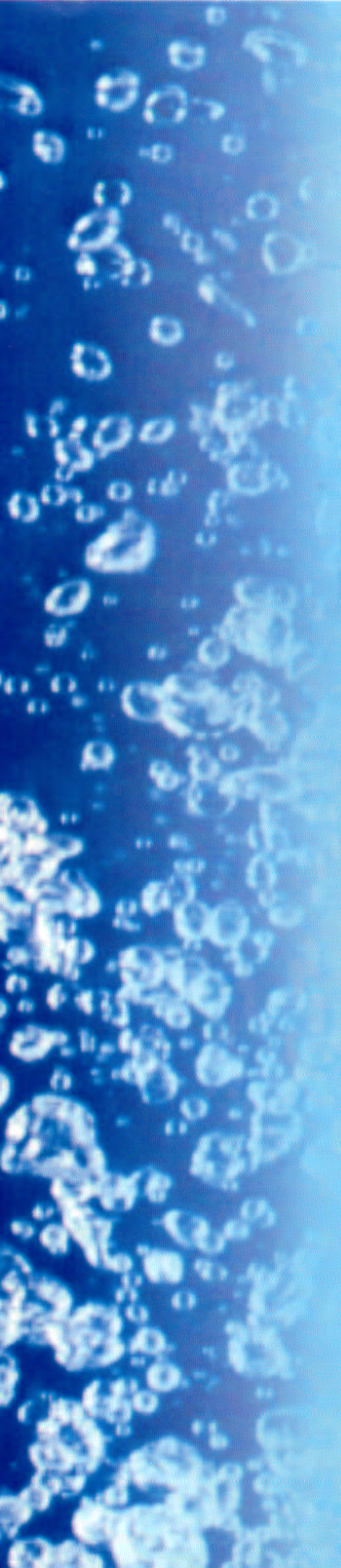
RESIDENTIAL • COMMERCIAL • MARINE

When  
Experience  
Counts<sup>®</sup>



CLASS I  
ANSI/NSF 40





The Clearstream Wastewater Treatment System is a highly efficient "extended aeration" sewage treatment plant. This system, through aeration and clarification, provides a proper environment for aerobic bacteria and other micro-organisms that convert the incoming sewage into clear, odorless, and organically stable water. Test results taken from actual in-service applications of Clearstream Systems average consistently below the United States Environmental Protection Agency requirements for direct discharge of treated effluent.

Because of the high quality of effluent discharged from the Clearstream System, many alternative methods of disposal are made possible. Some regulatory agencies allow direct discharge of the effluent to streams, lakes, bays and other bodies of water. Where the regulatory agency does not allow direct discharge of treated effluent, many alternative on-site disposal methods may be used. Spray irrigation and drip irrigation of lawns, pastures, landscape beds, or even golf courses are common reuse methods. With additional accessories, the recycle of the effluent is made possible for many other non-potable water uses.

In areas with very slow percolating soils and/or high water tables, wastewater may surface even on new absorption systems. In areas with soils that percolate too fast, in rocky terrain,

or in areas with high water tables, the effluent from a septic tank can move through the soil with little soil treatment, thus polluting underground water supplies or surface waters. In all the above cases, the discharge from the Clearstream System, when coupled with properly designed accessories, can prevent these type health hazards or pollution problems.

The simple compact design of the Clearstream System makes it easy to install and maintain. The 115V aerator is located remotely to prevent water damage or corrosion that can occur in tank mounted aerators. The aerator uses very little electricity and is easily replaced in less than five minutes. The durable, high quality aerator will last many years and is very inexpensive to repair or replace. A Clearstream audio visual alarm panel will notify the home owner immediately in the event of component or accessory malfunction.

The Clearstream Model 500N Wastewater Treatment System has been extensively tested by NSF, International under the lengthy and in-depth testing procedures of the NSF, International Standard 40. Clearstream test results averaged as low as 5 mg/l CBOD and 5 mg/l TSS. All Clearstream Standard 40 Models 500N, 600N, 750N, 1000N, and 1500N are classified as Class I systems with or without the optional Model 1100 Filter.



# WHY CLEARSTREAM?

## PERFORMANCE

Clearstream Wastewater Treatment Systems have been tested and certified by NSF, International to meet and exceed the requirements of the International Standard 40 evaluation developed by NSF and the Council of Public Health Consultants. In addition to the testing of our products by NSF, Clearstream has for many years successfully marketed its treatment systems nationally and internationally to meet a wide range of regulatory requirements. You can count on Clearstream products to work for you.

## SIMPLICITY

Clearstream does not believe that the "State of the Art" in wastewater treatment systems is to see how complicated we can make a treatment system. We have based our business on the concept that "State of the Art" is to make the system as simple as possible while consistently providing a product that produces the highest degree of water quality. We strive for and have obtained simplicity and reliability of performance with our products. When special applications are encountered, Clearstream has all the necessary accessories to meet those needs. Some of these accessories include denitrification, tertiary filtration, chlorination, ozone or ultra violet disinfection, and remote electronic monitoring.

## RELIABILITY

Although wastewater treatment systems are our life at Clearstream, we understand they are not and should not be constantly on your mind. Our mission is for the consumer not to be bothered by frequent malfunctions of their wastewater treatment system. The user friendly design of our equipment, along with the finest materials and components available, ensure long, trouble-free performance of our treatment systems.

## CONSTRUCTION

Clearstream manufactures treatment systems constructed of "Fiberglass Reinforced Plastic" commonly called Fiberglass, and we also have Precast Reinforced Concrete tanks available. Our Fiberglass tanks are constructed of the finest chemical resistant isophthalic polyester resins and the best fiberglass reinforcement strands available. These tanks have been tested and certified by an approved IAPMO testing laboratory to meet and exceed the stringent construction requirements of the International Association of Plumbing and Mechanical Officials (IAPMO). In addition, Clearstream Fiberglass tanks have passed the test of time. Many thousands of our Fiberglass tanks have been in successful service for many years. Clearstream Precast Reinforced Concrete tanks are designed by structural engineers specializing in precast design. Our Precast Reinforced Concrete tanks meet the appropriate ASTM (American Society for Testing Materials) construction standards and have demonstrated excellent service in the field. Both the FRP and Concrete Clearstream tanks utilize only non-corrosive hardware. All hardware items are either PVC, Stainless Steel, Polyethylene or Neoprene. Corrosion is a major problem with buried tanks, particularly when they exist in a corrosive wastewater environment. Because Clearstream does not cut corners, we manufacture tanks that provide many years of service without structural failure or leakage.



## **COMPONENTS**

Clearstream's aerators, control panels and accessory equipment are manufactured in the U.S.A. The aerator is housed in an attractive, protective enclosure that not only protects the aerator from the elements, but is also aesthetically pleasing. The Clearstream control panels utilize UL approved weather proof panel boxes designed for outdoor service. Clearstream has a long record of providing our customers with top quality materials and components at competitive prices.

## **WARRANTY**

Clearstream warrants its equipment for two years, without hidden conditions. Our equipment, of course, lasts much longer than the warranty we provide, but we do not believe in offering prorated warranties that involve complicated warranty procedures, exceptions and exclusions. Our warranty is simple – if the equipment is defective, we will either give you a new one or repair the one you have. We choose not to use our warranty as a sales gimmick. The warranty replacement of defective components is a serious subject to us. We want to process our warranties without complications or controversy.

## **OPERATING COSTS**

We believe Clearstream to be the most cost effective treatment system on the market. We believe this because we have made that one of our primary design considerations. The simple design and easy access to all Clearstream components and compartments allow service personnel to do their work with as little effort as possible. That translates into savings for you the consumer. With our many years of experience in the wastewater business, we designed the system so that when service is necessary, it can be accomplished without interrupting your schedule or requiring your yard to be dug up. The Clearstream 500GPD aerator uses only 131 watts of electricity which is less than a 150 watt light bulb. At 7 cents per kilowatt hour, that translates into only \$6.60 monthly.

## **LOCAL INSTALLATION AND SERVICE**

Clearstream only sells its products to professional on-site installers. Clearstream offers not only initial factory training for installation and service of our equipment, but we also provide on-going training and factory backup for problems encountered by our wholesale customers. Clearstream maintains one of the largest networks of wholesale customers in the industry because of our hands-on relationship with our customers. Clearstream's unparalleled experience allows us to help our customers solve potential problems that may occur. This backup assures you that not only do you have a local professional at your service, but you also have Clearstream's experience behind your local on-site professional.

## **REPUTATION**

To be confident of who you are doing business with, we urge you to check out both Clearstream and the professional on-site installer with the Better Business Bureau and the local permitting authority over the on-site program in your area. We are proud of our reputation and business practices and encourage potential customers to check on our record.



# Consider the advantages of The Clearstream Home Wastewater System above other comparable units:

## TANK

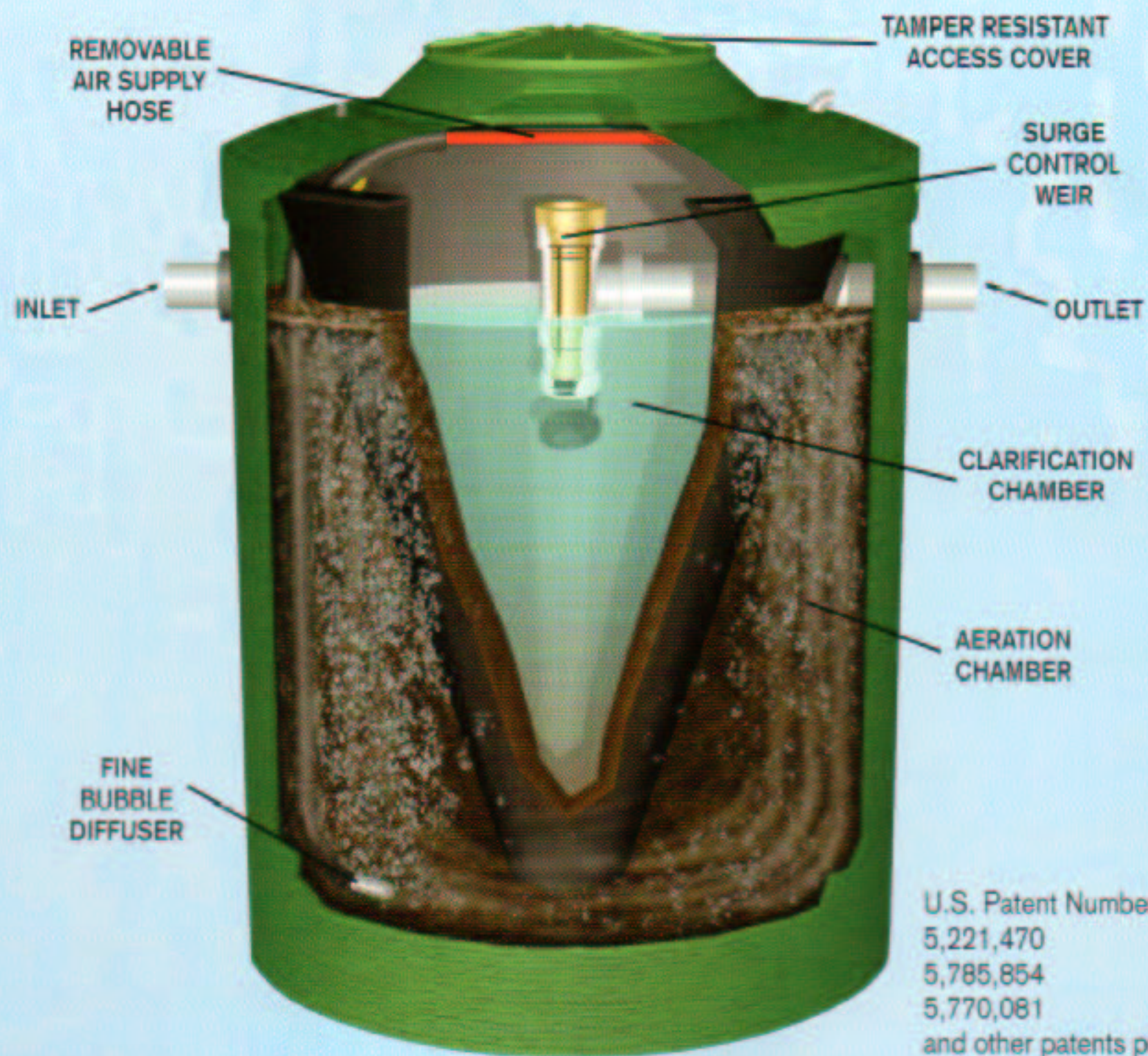
- Sturdy fiberglass or concrete construction
- Easy to install design
- Long-lasting non-corrosive components
- Easy to service without digging in yard
- Utilizes small pretreatment tank for grease and trash removal

## AERATOR

- Long life
- Two-year warranty
- Quiet operation
- Very low electrical usage
- Installed outside tank to avoid flooding

500N costs approximately \$6.60 per month to operate at 7cents per KWH

## CLEARSTREAM TREATMENT UNIT



Clearstream requires that a trash trap (septic tank) be utilized in front of the Clearstream tank to keep grease, toxic household cleaners and other undesirable substances from upsetting the aerobic bacteria in the treatment tank and to keep maintenance costs at a minimum.

Clearstream Wastewater Systems, Inc. has long enjoyed an excellent reputation among environmental engineers, regulatory agencies, and customers around the country. Clearstream's sewage treatment systems are available in sizes from 500 gallons per day to 1,000,000 gallons per day to serve residential, commercial and industrial applications.

**For more information concerning the application, price and availability  
of a Clearstream Wastewater Treatment System, please contact:**

or

Clearstream Wastewater Systems, Inc.  
P.O. Box 7568  
Beaumont, TX 77726  
(409) 755-1500 • Fax (409) 755-6500  
[www.clearstreamsystems.com](http://www.clearstreamsystems.com)  
(800) 586-3656



## GUARANTEE

The Clearstream System has a two-year limited warranty against defects in material and workmanship from the date of purchase. The system and/or its components will be repaired or replaced with new or rebuilt equals to the original equipment, if all installation, operation and maintenance instructions of the manufacture have been adhered to.

## SERVICE

In order for the Clearstream system to function at optimum performance levels, the system will require periodic service. The recommended service schedule includes:

SERVICE	FREQUENCY
Repair or replace aerator_____	2 to 10 years
Clean filters on aerator_____	6 months to 2 years
Break up scum in clarifier_____	6 months to 2 years
Pump sludge from aeration tank _____	2 to 5 years
Pump sludge from trash trap _____	2 to 5 years
Check aeration diffuser_____	annually
Check surge control weir_____	6 months

For the first two years from the date of purchase, your local installer, from whom you purchased your Clearstream System, will inspect your system on a routine basis for operational problems. Service on Clearstream electrical and mechanical components will be performed at no charge, if such components are found to be defective.

After the termination of the guaranteed service period, your local installer will make available a service policy for a nominal annual fee.

### TO PREVENT MALFUNCTIONS OF YOUR SEWAGE SYSTEM, THE FOLLOWING GUIDELINES SHOULD BE FOLLOWED:

1. Any sewage treatment system, whether aerobic or septic, should not have inorganic materials (plastics, cigarette butts, condoms, throwaway diapers, etc.), which the bacteria cannot consume, discharged into the system.
2. Large amounts of harsh chemicals, oil, grease, high sudsing detergents, discharge from water softeners, disinfectants or any other chemical or substance that kills bacteria should not be discharged into the system. Garbage disposals are not recommended.
3. Excessive use of water, over the design flow of the system, will cause the system not to perform to its fullest capabilities.
4. The proper operation of this or any other home sewage system depends upon proper organic loading and the life of the micro-organisms inside the system. Clearstream is not responsible for the in-field operating of a system, other than the mechanical and structural workings of the plant itself. We cannot control the amount of harsh chemicals or other harmful substances that may be discharged into the system by the occupants of a household. We can only provide a comprehensive owners manual that outlines most substances that should be kept out of the system.

MODEL	SERVES UP TO	RATED
Model 500N	5 Residents @ 100 G.P.P.	500 G.P.D.
Model 600N	6 Residents @ 100 G.P.P.	600 G.P.D.
Model 750N	7.5 Residents @ 100 G.P.P.	750 G.P.D.
Model 1000N	10 Residents @ 100 G.P.P.	1000 G.P.D.
Model 1500N	15 Residents @ 100 G.P.P.	1500 G.P.D.